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INSTALLATION RESTORATION PROGRAM

COMMUNITY FACT SHEET

U.S. Naval Ammunition Support Detachment Vieques Island, Puerto Rico

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The U.S. Department of the Navy plans to transfer land on the western side of Vieques Island to the Municipality of Vieques, the Department of the Interior, and the Puerto Rico Conservation Trust. It is the Navy's responsibility and desire to transfer the land in a condition that protects both human health and the environment. This fact sheet explains the Navy's process for environmental investigations and discusses the progress of the ongoing environmental investigation of this land. Future fact sheets will describe the results of the investigation and what cleanup or other actions are recommended. Information on how the public can participate is presented at the end of this fact sheet.

Introduction

The property known as the Naval Ammunition Support Detachment (NASD), occupies approximately 8,000 acres on the western end of Vieques Island, Puerto Rico.

In October 2000, the U.S. Congress passed legislation allowing the U.S. Navy to transfer about 4,000 acres of NASD t o the Municipality of Vieques and 3,100 acres to the U.S. Department of the Interior (DOI). About 800 acres will be transferred to the Puerto Rico Conservation Trust for use as Conservation Zones. The Navy will keep about 100 acres, where the communications facilities on Monte Pirata and the Relocatable Over-The-Horizon Radar (ROTHR) are located. The land transfer is scheduled for May 1, 2001.

About 50 acres of the 4,000 acres of land that will be conveyed to the Municipality of Vieques have been found to potentially contain hazardous substances or petroleum products. These areas are now being investigated to determine if cleanup or other actions are needed to protect human health and the environment.

Past Use of NASD

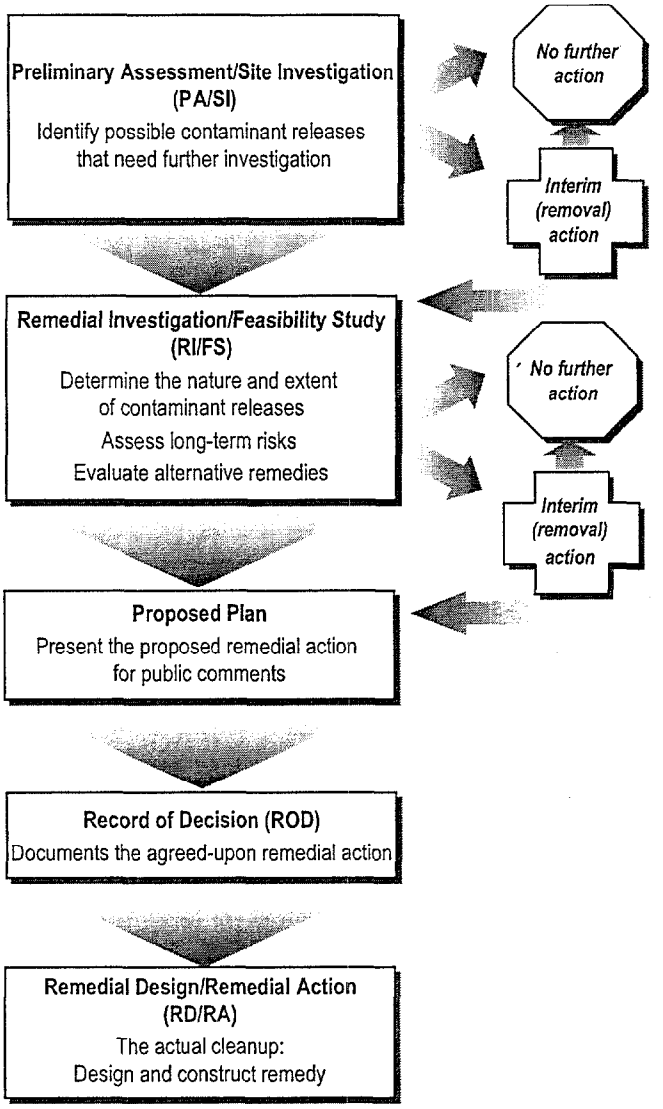
Military operations on Vieques Island began around 1943 and have included military training, ammunition storage, and support for military exercises. The mission of NASD was to receive, store, and issue all of the ordnance that was authorized by Naval Station Roosevelt Roads (NSRR) for support of U.S. Navy Atlantic Fleet activities.

The former support base in the northeastern portion of NASD contains offices, a transportation shop, a carpentry shop, and a sewage treatment plant. Until early 2000, munitions were stored in magazines scattered throughout the central portion of NASD.

Environmental Restoration

Like many other military installations and civilian industrial facilities, NASD contains areas that were contaminated by past activities such as training, maintenance of vehicles and buildings, storage of supplies, and waste disposal.

The Navy's environmental restoration or Installation Restoration **(IR)** process identifies contaminated sites that should be considered for cleanup actions. This figure shows the steps that the Navy follows in the IR process, which is very similar to the U.S. Environmental Protection Agency's **(EPA)** "Superfund" study process.



Environmental Restoration Process

Environmental restoration usually takes several years to complete, because it is designed to take care of the most contaminated sites first, to make the best use of available funding. The Navy has been speeding up the normal process at the NASD, because the land will soon be transferred out of Navy ownership.

Where Are We Now?

Currently, NASD is in the Preliminary Assessment/Site Investigation (**PA/SI**) stage of the IR process.

Previous studies of NASD, conducted between 1988 and 1992, identified 10 areas where waste disposal or other activities may have resulted in contamination. These are called either Solid Waste Management Units (**SWMUs**) or Areas of Concern (**AOCs**). In addition to the 10 known sites, another 7 potentially contaminated areas were identified by an **Environmental Baseline Survey (EBS)** published in October 2000.

Preliminary Assessment/Site Investigation - Phase I

Field work to investigate the first 10 of these areas was conducted in April through June 2000. EPA and the Puerto Rico Environmental Quality Board (EQB) reviewed the draft report. The final *Phase I Expanded Preliminary Assessment/Site Investigation* (**PA/SI**) report is available for public review in the Public Information Repositories (see addresses on the last page). A Phase II PA/SI is underway for the remaining 7 sites.

The purpose of the Expanded PA/SI is to (1) determine whether or not hazardous substances have been released at levels that might pose a risk to human health and the environment, and (2) based on the data, to recommend either no further action or more detailed investigation.

Samples from soil, sediment, surface water, and **groundwater** were collected and analyzed. An independent laboratory validated all of this analytical data. Samples were analyzed for **metals**, volatile and semi-volatile organic chemicals (**VOCs** and **SVOCs**), pesticides, polychlorinated biphenyls (**PCBs**), and explosives.

The results of the laboratory analyses helped the Navy recommend the next step for each of the sites. The concentrations (amount) of chemicals that were detected in samples were compared to EPA's **risk-based screening criteria**. Areas where chemicals were found to be higher than EPA's very conservative screening criteria will need to be investigated in more detail.

The Phase I PA/SI report recommends a full Remedial Investigation/Feasibility Study (**RI/FS**) study at four of these sites: SWMU 04-Inactive Waste Explosive Open Burn/Detonation (OB/OD) Area; SWMU 06-Mangrove Disposal Site; SWMU 07-Quebrada Disposal Site; and AOC E-UST Site 2016.

Interim Actions

At any point during the study process, if something is found that might be an immediate risk to human health or the environment, the Navy will take **interim actions** to protect the public and the environment.

Interim actions are taken to reduce the chance that people will be **exposed** to chemicals, or to keep chemicals from moving away from the site into the environment, before the full process of investigation and remediation is completed.

Interim actions (or **removal actions**) can include fences and warning signs, to keep people away from contaminated areas or, if necessary, physically removing the most contaminated soil or water from a site.

To protect local residents, the four sites listed above are identified by signs and access is controlled by chains, posts, or fences. These protections will remain in place until all the necessary study and cleanup activities are completed.

Preliminary Assessment/Site Investigation - Phase II

A Phase II PA/SI is now underway to investigate the remaining 7 sites and to provide some additional information about the Phase I sites. Field work was conducted in November 2000 through January 2001. After the data is validated by an independent laboratory and analyzed, a draft report from the Phase II Expanded PA/SI should be ready in July 2001.

Background Study

At several sites, metals were detected above the risk-based screening levels in soil or groundwater, but those samples were very similar to offsite (background) samples. This means that the metals found in these places probably came from natural sources in the soil and rocks. A background investigation of surface and subsurface soil and groundwater is underway, to better understand the range of naturally-occurring metals in the soil and groundwater on NASD. The results will be presented as part of the Phase II PA/SI report.

Ordnance/Explosives (OE)

The EBS and the Phase I PA/SI also recommended further OE surveys at several sites: SWMU 04, SWMU 06, and AOC J (the Former Operations Area Disposal Site, which is one of the Phase II sites). The purpose is to find out if any more OE is left, on or beneath the ground, from disposal or other past activities at these sites.

Fences, signs, and roving security around the perimeter will warn the public to stay away from these sites until

any OE items can be safely removed, or the surveys show that none are left.

Research of old records and interviews have found some evidence that Fleet Marine Force units conducted occasional amphibious training exercises on the western side of NASD. These training exercises gave the Marines a chance to practice jungle warfare, ambush, and beach landings. "Live" weapons firing was not allowed, because the training area was near magazines where ammunition was stored. Only "blank" bullets, pyrotechnics (flash cartridges), and smoke grenades were used. However, to be on the safe side, the Navy is conducting an OE field survey of Green Beach.

What Happens Next?

The NASD is scheduled to be transferred out of Navy ownership by May 1, 2001. A total of 17 potentially-contaminated areas have been identified on NASD and are being studied. In December 2000, the Governor of Puerto Rico signed a document that authorizes the Navy to continue the investigation and cleanup process after the land is transferred. The land that will be transferred to the Municipality of Vieques contains 14 of the 17 potentially-contaminated areas (about 50 acres total); the property that will be transferred to DOI contains the other 3 areas.

Remedial Investigation/Feasibility Study

At the sites where the PA/SI finds that further study is needed, the RI/FS will include more intensive sampling and analysis and formal risk assessments. The objective is to find out whether these sites pose a real risk to human health or the environment and to determine the best way to minimize that risk by eliminating the pathways that people and wildlife can be **exposed** to chemicals.

The RI/FS will determine the *extent* (how much, how large an area) of contamination exists at each site; will assess the possible risk to human health or the environment; and will provide a detailed analysis and comparison of *remedial alternatives*, including estimated costs. Areas where chemicals were not found, or are not above the EPA's conservative screening criteria, will be recommended for No Further Action (NFA).

Risk Assessment

Human health and ecological risk assessments are conducted to determine if people or wildlife could be harmed by **exposure** to chemicals at these sites. In addition to the RI/FS sites, the PA/SI recommends risk assessments at some of the other sites where additional sampling is not needed.

Site Management Plan

A *Site Management Plan* is being prepared to provide a schedule for the process of investigation and remediation at NASD. When it is approved, the Site Management Plan will be available for public review. Funding has already been dedicated over the next five years for investigating and cleaning up NASD.

After the land is transferred, the Navy will continue to be responsible for all of the contaminated areas until the required studies and remedial actions have been completed. The Navy is working closely with EQB and EPA. After the investigations are completed, the Navy will propose any necessary remedial actions for review and approval by EPA and EQB. The public also will be invited to comment on the proposed remedial actions.

Public Participation

Public participation is an important part of the environmental restoration process.

In October 2000, the Navy published a notice in local newspapers, inviting the public to review a Finding of Suitability for Early Transfer (FOSET) and related documents for NASD.

In November 2000, the Navy published newspaper notices and distributed a Community Fact Sheet (Issue Number 1), to offer the public an overview of the environmental investigation of NASD.

In December 2000, Navy staff and consultants conducted interviews with 21 Vieques residents and community leaders. Insights gained from these interviews provide the foundation for a Community Relations Plan (CRP).

The CRP outlines the Navy's efforts to establish communication with community members about the environmental restoration program at NASD. The goal is to make sure that community members have input into the decision-making process, and to make certain that the Navy is aware of, and responsive to, public concerns about this process. A Draft CRP was submitted to EPA and EQB for review. The Final CRP will be placed in the public information repositories in May 2001.

The Navy is putting together a mailing list of interested persons. ***To get on the mailing list, please contact one of the people listed at the end of this fact sheet.***

For people who use the Internet, the Navy has set up a new website about the NASD environmental investigation at http://www.vieques-navy-env.org/

The environmental restoration team wants to hear from you!

Please let us know what specific questions or comments you have about the environmental investigation at NASD, by contacting one of the people listed at the end of this fact sheet.

Glossary

AOC Area of Concern. An area that might be contaminated, based on information about its previous use.

CERCLA Comprehensive Environmental Response, Compensation and Liability Act (commonly known as "Superfund"). Process for identifying, investigating, and cleaning up hazardous substances that have been released into the environment and may pose a risk to human health and the environment. The Navy's IR program generally follows the CERCLA study process.

EBS Environmental Baseline Survey. Determines whether Navy-owned property land is environmentally safe for transfer and reuse. Consists of record searches, interviews, visual site inspection and (sometimes) sampling. The purpose is to identify areas where hazardous materials or petroleum products may have been released by past activities.

EPA U.S. Environmental Protection Agency

exposure, exposed People are exposed to a chemical by breathing it (inhalation), eating or drinking something that contains it (ingestion), or by getting it on their skin (dermal contact). The release of a chemical into the environment does not always result in exposure. The health effects of exposure to any hazardous substance depend on the dose (how much); the duration (how long); how the exposure occurred; personal traits and habits of the people who are exposed; and whether other chemicals are also present. The goal of the IR program is to prevent or minimize exposure.

exposure pathway A way that people or animals could be exposed to chemicals. For example, water can be an exposure pathway for fish. Eating fish can be an exposure pathway for people.

groundwater The water that flows under the ground and supplies wells and springs. It can come from rainwater that soaked into the ground or it can flow underground from "uphill" locations. Groundwater can flow out into a stream or another "downhill" surface water body. Groundwater can carry contaminants from one place to another.

interim action A short-term action that is taken to address a release or threatened release of hazardous substances.

IR Installation Restoration. The Department of Defense program to evaluate and clean up old hazardous waste sites. Generally follows the CERCLA process.

metals Naturally occurring elements that also can be released to the environment by various industrial activities.

No further action Official determination by lead agency that no further action is necessary at the site. Level of contamination poses no unacceptable risk or the cleanup action has met its goals.

OE Ordnance/explosives. Ordnance includes military material such as weapons, ammunition, combat vehicles, and the equipment used to maintain them. Explosives can include ammunition, gunpowder, flash cartridges, blasting caps, etc.

PA/SI Preliminary Assessment/Site Inspection. The first of three phases in the IR process. The purpose is to decide which sites pose little or no threat to human health or the environment or which sites may pose a threat and need more detailed investigation.

PCBs Polychlorinated Biphenyls. Man-made substances used to cool and lubricate electrical equipment, such as transformers and fluorescent lighting. The manufacture of PCBs in the U.S. stopped in 1977.

Proposed Plan Presents the proposed remedial action for public comments.

RD/RA Remedial Design/Remedial Action. Third phase of the IR process: the detailed design and construction of the actual cleanup or other type of remedy.

removal action An action that is taken to keep hazardous substances from moving away from a site, or to reduce the chance that people will be exposed to them. Often an interim measure rather than a final solution. Can take place at any time during the IR process.

RI/FS Remedial Investigation/Feasibility Study. The second of the three phases in the IR process. Consists of soil and water sampling, pollutant characterization, and risk assessment.

risk-based screening criteria Conservative EPA standards that define how much of a chemical can be present in surface and subsurface soils, sediment, surface water, or groundwater, before additional investigation and corrective action is required.

ROD Record of Decision. A formal public document, agreed to by all parties, that outlines the action to be taken to clean up the site.

Superfund See CERCLA

SWMU Solid Waste Management Unit. A designated area that is, or is suspected to be, the source of a release of hazardous material into the environment. Requires investigation and/or corrective action.

VOCs, SVOCs Volatile and semi-volatile organic compounds. Chemicals such as dry cleaning solutions or solvents commonly used for cleaning and degreasing military equipment. VOCs evaporate readily into the atmosphere, SVOCs less quickly.

For More Information

Public Information Repositories

Members of the public are encouraged to visit these Public Information Repositories to review IR documents.

Biblioteca Pública, José Gautier Benitez
Calle Baldorioty de Castro, Vieques Island, PR
Hours: Monday–Friday, 8:00 a.m.–6:00 p.m.
Telephone: 787-741-3706

Vieques Historic Archives
Museo Fuerte Conde de Mirasol
Barriada Fuerte, Vieques Island, PR
Hours: Wednesday–Sunday 10:00 a.m.–4:00 p.m.
Telephone: 787-741-4688 or 787-741-1717

Biblioteca Pública Municipal, Alejandrina Quiñones Rivera
Calle Fco. Gauthier #816
URB. Rossy Valley, Ceiba, PR
Hours: Monday–Thursday, 8:00 a.m.–12 Noon and 1:00–6:00 p.m.; Friday, 8:00 a.m.–4:30 p.m.
Telephone: 787-885-0605

For questions or to get on the mailing list:

Ms. Madeline Rivera Ruiz
Environmental Engineering Division
Public Works Dept. Bldg. 31
U.S. Naval Station Roosevelt Roads
Ceiba, PR 00735
Telephone: 787-865-5337
E-mail: RiveraMad@navstarr.navy.mil

Mr. Christopher T. Penny
Atlantic Division, Code EV23
1510 Gilbert Street
Norfolk, VA 23511-2699
Telephone: 757-322-4815
E-mail: PennyCT@efdlant.navfac.navy.mil

For additional information:

Sr. Genaro Torres León
Puerto Rico Environmental Quality Board
National Plaza Bldg., Office 225
Ponce de León Avenue
Hato Rey, P.R. 00917
Telephone: (787) 767-8181 Ext. 2220 or 2219
Email: jcaemer@prtc.net